

Title (en)  
APPARATUS FOR IMPEDANCE MATCHING

Title (de)  
VORRICHTUNG ZUR IMPEDANZANPASSUNG

Title (fr)  
DISPOSITIF D'ADAPTATION D'IMPÉDANCE

Publication  
**EP 2638625 B1 20150401 (DE)**

Application  
**EP 11788368 A 20111111**

Priority  
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Abstract (en)  
[origin: WO2012062477A2] An apparatus (1) for the impedance matching of an electrical load (2) to a generator (3) has input connections (6a, 6b) for connection to the generator (3) and output connections (7a, 7b) for connection to the load (2). The apparatus (1) has a converter (9) which connects the input connections (6a, 6b) to the output connections (7a, 7b) and by means of which an input voltage which is applied between the input connections (6a, 6b) can be converted into an output voltage which is produced between the output connections (7a, 7b). The converter (9) has at least one energy storage means which is connected to at least one of the output connections (7a, 7b) by means of an active diode (15), a controllable switching device which is connected to said energy storage means, and an actuation device (16) for said switching device. The switching device is designed and can be moved to a first and a second switching state in such a way that energy from the generator (3) can be stored in the energy storage means in the first switching state and energy which is stored in the energy storage means can be output to the load (2) in the second switching state. The apparatus (1) has a detector (17), which is connected to the input connections (6a, 6b), for detecting a measurement signal for the impedance matching. The actuation device (16) has an activation input (24) by means of which it can be moved to a first and a second operating state. The actuation device (16) is designed in such a way that the first switching state is avoided in the first operating state and a changeover is made between the switching states in the second operating state. The energy which is output by the generator is temporarily stored in an input capacitor for the duration of the first operating state. The detector (17) is connected to the activation input (24) by way of its measurement signal output.

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